<u>Remarks:</u>

Claims 1–20 remain for consideration in this application, with claims 1, 7, 11 and 17 being independent. Claims 17–20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17–20 were further rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Claims 1, 2, 4, 6, 11–14 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Leong et al., U.S. Patent No. 6,269,398. Finally, claims 7–10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Leong in view of Mathur, U.S. Patent No. 6,308,220. The Examiner also advised that JAVA should be capitalized wherever it appears and should be accompanied by generic terminology.

The specification has been amended to capitalize the trademark "JAVA" in each place where it appears and to accompany its use with generic terminology.

Regarding the rejections based on 35 U.S.C. § 112, second paragraph, the Examiner argued that

> [a]lthough the term "applet" is itself not necessarily a trademark, JAVA is a trademark; and since an applet is completely derived from the JAVA programming language, it stands to reason that if JAVA were to change (or become obsolete) so would the "applet" by definition. Therefore, the term "applet" renders the claim vague and indefinite because the scope and meaning of the term "applet" is defined in terms of a trademark, i.e., the JAVA programming language. Page 2, line 19 – page 3, line 1.

Applicant respectfully asserts that the word "applet" is not defined in terms of the trademark "JAVA," and therefore use of the term does not render claim 17 vague

and indefinite. The term "applet" has a meaning completely independent of any meaning assigned to it by the JAVA™ programming language. The 1990 edition of the Merriam Webster Collegiate Dictionary, for example, defines applet as "a short application program especially for performing a simple specific task." It will be appreciated that the JAVA™ programming language was not developed until 1995— *five years after* the Merriam Webster definition was published. *See, e.g.,* http://www.sun.com/aboutsun/coinfo/history.html. The term "applet" and its meaning, then, predate any use of the term by the JAVA™ programming language.

Furthermore, the term "applet" is used in the application according to its generic meaning and not in connection with any particular programming language. The term first appears in the application in the section entitled "SUMMARY OF THE INVENTION," for example, which reads

> [a]n applet sends a logical name based on a server table name
> to the factory server. The factory server creates a remote
> object which is used by the applet to obtain an address to a
> table in the switch." Page 2, lines 30–32.

As is pointed out in the Office Action, claim 17 also uses the term "applet" independently of any particular programming language. The term "applet" as used in the summary and in the claims means a short program particularly for performing specific tasks such as, for example, retrieving and displaying a list of telecommunications switches. This meaning is consonant with the generic meaning of the term and is not specific to a particular programming language.

Finally, the portion of the detailed description cited in the Office Action as "defining" applet, page 5 lines 23–26, does not restrict the meaning of "applet" to a JAVA™

applet, but merely discloses the "best mode contemplated by the inventor of carrying out

his invention," as required by 35 U.S.C. § 112, first paragraph. The specification merely

states, for example, that the "server computer 16 is also programmed with a Java applet,"

but does not exclude use of other programming languages; and the specification thereafter

refers to the applet only as "the applet." (*See, e.g.*, page 5 line 27; page 6 lines 13, 15, 19,

23, 24, 26, 30; and page 7 lines 9, 10, 12, 20, 24, 28.) The amendment to the

specification, submitted pursuant to the requirement of the Office Action to accompany the

trademark JAVA™ with generic terminology, makes it abundantly clear that an applet may

be encoded using other programming languages. Thus, the application does not define

"applet" as a Java™ applet or otherwise eliminate alternative embodiments. In fact, the

application specifically points out that equivalents of the preferred embodiment "may be

employed and substitutions made herein without departing from the scope of the invention

as recited in the claims." (Page 8, line 32 – page 9, line 2.)

With regard to the rejection based on 35 U.S.C. § 101, claim 17 has been

amended to more clearly direct it to statutory subject matter. In the Office Action, original

claim 17 was rejected in part as being directed to non-statutory subject matter. It was

argued in the Office Action, for example, that

> a statutory computer process claim "taken as a whole" must
> have some "practical application" outside the "transformation
> of signals or data inside a computer" to be considered
> statutory. Since claims 17–20 are only manipulating data
> within a database (the switch list) and have no apparent
> practical application, they are not patentable material under 35
> U.S.C. 101. Page 3, lines 15–19.

Note that while a mere abstract idea or mathematical algorithm implemented

by a computer is not statutory subject matter per se, a claimed computer process that is

limited to a practical application of the abstract idea or mathematical algorithm in the technological arts *is* statutory. MPEP 2106.IV.B.2(b)(ii). Several examples of such processes listed in that section simply operate on or transfer data within a computer, yet are deemed statutory because of their practical application.

Applicant respectfully asserts that the invention of claim 17 is limited to a practical application and is, therefore, statutory. Claim 17, for example, is not drawn merely to an abstract process for manipulating data, but includes steps for, among other things, accessing information contained in a data table of a telecommunications switch, allowing a user to modify the information, and uploading the modified data table to the switch. This claim advances the art by, for example, rendering the processing of updating such data tables faster and easier and is thus analogous to the first example of a statutory process listed in section 2106.IV.B.2(b)(ii) of the MPEP:

> [a] computerized method of optimally controlling transfer,
> storage and retrieval of data between cache and hard disk
> storage devices such that the most frequently used data is
> readily available.

Claim 17, therefore, is not drawn to mere abstract ideas, but is limited to the practical application of "a computer readable medium for directing a computer to act as an interface for a telecommunications switch" and meets the requirements of 35 U.S.C. § 101.

Turning now to the rejections based on 35 U.S.C. § 103, Applicant respectfully asserts that a *prima facie* case of obviousness has not been established in the Office Action.

Obviousness, it will be appreciated, can be a problematic basis for rejection because the Examiner, in deciding that a feature is obvious, has benefit of the Applicant's

disclosure as a blueprint and guide, whereas one with ordinary skill in the art would have no such guide, in which light even an exceedingly complex solution may seem easy or obvious. Furthermore, once an obviousness rejection has been made, the Applicant is in the exceedingly difficult position of having to prove a negative proposition (i.e., non-obviousness) in order to overcome the rejection. For these reasons, MPEP § 2142 places upon the Examiner the initial burden of establishing a *prima facie* case which requires, among other things, that there be identified some motivation or suggestion in the prior art or in the knowledge of one with ordinary skill to modify the reference or to combine reference teachings. If the Examiner fails to establish the requisite *prima facie* case, the rejection is improper and will be overturned. *In re Rijckaert*, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). Only if the Examiner's burden is met does the burden shift to the applicant to provide evidence to refute the rejection.

The Examiner must satisfy three criteria in order to establish the requisite *prima facie* case of obviousness: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine their teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all the claim limitations. MPEP §706.02(j), citing *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). Furthermore, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); *see also In re Gordon*, 221 USPQ2d 1125, 1127

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(Fed. Cir. 1984). Additionally, "if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP §2143.01.

In meeting this initial burden, the Examiner "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." *In re Fine*, 5 USPQ 2d 1596,1600 (Fed. Cir. 1988). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on the applicant's disclosure. *In re Vaeck*, 1442 (Fed. Cir. 1991). Thus, "[m]easuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. *See, e.g., W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 220 USPQ 303, 313 (Fed. Cir. 1983).

Applicant respectfully asserts that a *prima facie* case of obviousness is not established in the Office Action because the prior art cited in the action does not teach or suggest all claim limitations. Leong, for example, does not teach or suggest a computer program or method for modifying data tables in a routing switch. While Leong discloses a method of monitoring *routers* on a network, the present invention relates to modifying data tables for *routing switches*. The Examiner concedes that Leong does not teach a voice-over-IP routing switch, but argues that such is suggested because

> there needs to be a router at the network level to have communication and the type of router is a design choice as any router performs the same generic function of routing information from one place to another. Page 9, lines 20–22.

Applicant respectfully disagrees and asserts that voice-over-IP routing switches and routers do not perform the same generic function but have different uses, and further present substantially different design and development challenges.
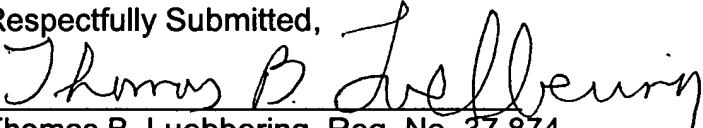
Routers, for example, operate at layer three (the network layer) of the OSI reference model. The OSI (Open Systems Interconnection) reference model is a set of seven layers that define the different stages that data must go through to travel from one device to another over a network. Broadly speaking, routers enable communications between independent computer networks. *See, e.g.,* Leong at col. 1, lines 38–43 and col. 4, lines 3–8. Switches, in contrast, operate at layer two (the data link layer) of the OSI reference model. While routers are implemented in software and allow different *networks* to communicate with each other, switches are implemented in hardware and allow different network *nodes* (a network connection point, typically a computer) of a network to communicate directly with one another in a smooth and efficient manner.

Routing switches, sometimes called layer-three switches, are the object of the present invention. Routing switches are essentially switches that also perform some routing operations (i.e., layer-three functions) usually reserved for routers. The fundamental difference between a router and a routing switch is that routing switches are implemented using optimized hardware so that they pass data as fast as switches, yet they make some decisions on how to transmit traffic at layer three, similar to a router. Because the layer-three functionality of routing switches is not as powerful, robust or flexible as that of standard, software-enabled routers, routing switches and routers cannot simply be interchangeably used in most networks.

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The present invention itself illustrates the fundamental differences between routers and routing switches that result in different design and development challenges. Because routing switches are implemented in hardware, for example, modifying data tables that define the hardware requires a different approach than modifying data tables that control the operation of a software-implemented router. Updating a hardware based routing switch can require, for example, special interfaces as illustrated by reference numerals 14 and 26 of FIG. 1 of the application. Leong, therefore, does not teach or suggest remotely updating information in a routing switch at all, but instead focuses on monitoring routers. Likewise, Mathur fails to teach or suggest a computer program or method for modifying data tables in a routing switch.

In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited.

Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully Submitted,

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